



REMARKS/ARGUMENTS

The amendment is in response to the Office Action dated May 18, 2005. Claims 1, 4-9, 13-17, and 20-27 are pending in the present application. Applicant has changed claims 1, 9, and 17 in this amendment. Accordingly, claims 1, 4-9, 13-17, and 20-27 remain pending in the present application.

Claim Rejections

The Examiner rejected claims 1, 4-9, 12-17, and 20-27 under 35 U.S.C. §102(e) as being anticipated by Ponnekanti (U.S. Patent No. 6,606,626). Applicant has amended independent claims 1, 9, and 17 to clarify these inventions and their subject matter. The feature of skipping the particular row when a lock is currently held on the particular row and an update on the row “is being performed” while the lock is held, has been clarified to recite that the update on the row “has not yet committed” while the lock is held. Support for the amendments is found in the Specification at, for example, page 5, lines 13-17; page 6; page 10, lines 4-10; and page 11, lines 10-12. Therefore, no new matter has been presented.

Ponnekanti does not disclose or suggest Applicant’s feature of claims 1, 9, and 17 of skipping a non-satisfying row, including when a lock is currently held on that row and an update on that row has not yet committed while the lock is held. As is well known in the art of database systems, an update for a row has “committed” when the update transaction for that row has finished and has made the changes of the update permanent, and the lock on the row is then released.

Ponnekanti teaches that when the data does not qualify, the scanning process checks whether the update has committed, and, if it has not committed, the scanning process sleeps on

the lock until the lock may be granted (col. 4, lines 23-27). The “sleeping” on the lock is a “block,” where the process waits for the lock to be granted (col. 4, lines 14-15). Thus, Ponnekanti’s scanning process does not skip the row if the update has not yet committed, nor suggests doing so—it waits for the lock to be released. Only if the update has committed, will the process skip the non-qualifying row (col. 4, lines 27-30). This is further described in Ponnekanti in col. 15, 40-48, and col. 16, lines 42-43.

In contrast, Applicant’s invention does skip the non-qualifying row, even when the update on the row has not yet committed. As explained in Applicant’s specification, Applicant’s skipping of a row that is being updated exposes the present invention to skipping a row that may actually qualify (if the update rolls back and the original content satisfies the predicates), but the benefits of significantly reduced lock contention outweigh these occurrences (Specification, page 5, lines 9-23).

In the office action sent May 18, 2005, the Examiner stated on pages 9 and 10 of the office action, that Ponnekanti teaches that a row is skipped if data does not qualify at col. 3, lines 62-65. However, these cited lines describe skipping a row when status bits for a row are “unset,” which indicates that the row is being or has been inserted (col. 14, lines 15-18), which is not an update on the row as recited in Applicant’s claims. Similarly, the Examiner cites col. 4, lines 6-10 and 16-18 as skipping the row, but these lines describe a delete transaction on the row, not an update as recited in Applicant’s claims. The Examiner also cites col. 4, lines 27-30 of Ponnekanti, which do describe scanning during an update transaction. However, Ponnekanti’s scanning, as explained above, skips a row only when the update has committed and completed, after a lock has been released and is not currently held on the row. Applicant’s scanning process skips a row including when an update has not yet committed and a lock is currently held on the

row, which is nowhere taught or suggested by Ponnekanti. Therefore, in view of the foregoing, Applicant believes that claims 1, 9, and 17 are patentable over Ponnekanti.

Claims 4-8 and 25 are dependent from claim 1 and are patentable over Ponnekanti for at least the same reasons as claim 1 and for additional reasons. Similarly, claims 12-16 and 26, and claims 20-24 and 27 are dependent from claims 9 and 17, respectively, and are patentable over Ponnekanti for at least the same reasons as their parent claims and for additional reasons.

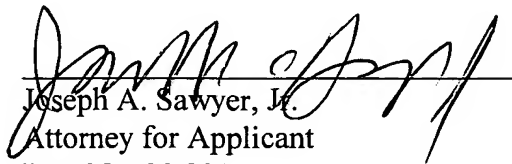
Conclusion

In view of the foregoing, Applicants respectfully submit that Ponnekanti fails to teach or suggest the inventions as recited in the pending claims. Accordingly, Applicants respectfully submit that claims 1, 4-9, 13-17, and 20-27 are allowable over the cited reference. Applicants respectfully request reconsideration and allowance of the claims as now presented.

Applicant's attorney believes that this application is in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicant's attorney at the telephone number indicated below.

Respectfully submitted,
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Date


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